

CLAIMS

What is claimed:

1. A continuous, intermediate belt for receiving heat-fusible toner images from a photoreceptor surface and for simultaneously fusing and completely transferring said images to a copy sheet as glossy-surface images, said belt comprising:

(a) a continuous support of fibrous fabric material having on at least the outer surface thereof a thin layer of elastomeric composition which impregnates, penetrates and anchors to said fibrous fabric material;

(b) a thin primer layer of a polyfunctional silicone composition applied to said elastomeric layer and hydrolyzed to form a chemical bond between said elastomeric layer and the hydrolyzed silicone composition,

(c) a thin outer layer of a heat-curable elastomer polymer applied to said hydrolyzed silicone primer layer and heat-cured to form a dry outer surface layer bonded to said primer layer, and having a smooth release surface for said heat fusible toner images.

2. A continuous intermediate belt according to Claim 1 in which said support of fibrous fabric comprises a woven fabric having high heat-resistance and mechanical strength.

said elastomeric layer and the hydrolyzed silicone composition,

(c) applying a thin outer layer of a heat-curable elastomer polymer applied to said hydrolyzed silicone primer layer and heat-cured to form a dry outer surface layer bonded to said primer layer, and

(d) heat-curing said elastomer polymer at elevated temperatures to form a smooth release surface for said heat fusible toner images.

8. A process according to claim 7 in which said support of fibrous fabric comprises a woven fabric having high heat-resistance and mechanical strength.

9. A process according to claim 7 in which said elastomeric composition impregnated into said support comprises a synthetic rubber.

10. A process according to claim 7 in which said primer layer comprises 3-amino triethoxysilane.

11. A process according to claim 7 in which said elastomer polymer comprises a vinylidene fluoride polymer.

12. A process according to claim 11 in which said elastomer polymer is a tetrapolymer of vinylidene fluoride, hexafluoropropylene, tetrafluoroethylene and a cure site monomer.